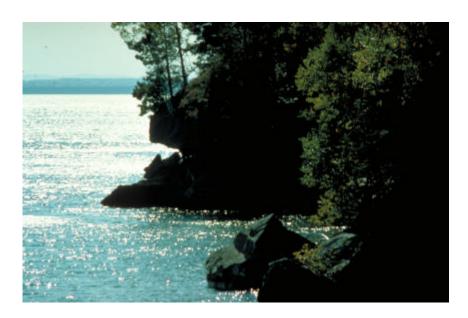
## Chapter 1

# Introduction and Purpose of the Lake Superior Lakewide Management Plan

This document replaces LaMP 2000 Chapter 1.



Lake Superior shoreline early fall, Lake Superior, Minnesota Photograph by Wisconsin Division of Tourism

Lake Superior Lakewide Management Plan 2004

### **Chapter 1 Contents**

0 INTRODUCTION1-1	
1 THE LAKE SUPERIOR BINATIONAL PROGRAM1-1	
1.1.1 LaMP Documents Produced To Date1-41.1.2 Ecosystem Components1-5	
2 LaMP ACCELERATION AND THE LaMP 2000 DOCUMENT 1-7	
1.2.1 What is LaMP 2004?       1-7         1.2.2 Action/Projects Matrices       1-8	
3 RELATIONSHIP OF THE LaMP TO OTHER INITIATIVES AND EFFORTS1-8	
1.3.1 Remedial Action Plans for Areas of Concern1-81.3.2 Great Lakes Binational Toxics Strategy1-91.3.3 U.S. Great Lakes Strategy1-10	
ddendum	
DDENDUM 1-A, BINATIONAL EXECUTIVE COMMITTEE CONSENSUS POSITION HE ROLE OF Lamps in the Lake restoration process	ON

### Chapter 1

### Introduction and Purpose of the Lake Superior Lakewide Management Plan

#### 1.0 INTRODUCTION

The Lake Superior basin is one of the most pristine and unique ecosystems in North America. Containing the largest surface area of any freshwater lake in the world, Lake Superior has some of the most breathtaking scenery in the Great Lakes and serves as a backdrop to a wide range of recreational and outdoor activities enjoyed by people from all over the world. Sparsely populated even today, Lake Superior has not experienced the same level of development, urbanization, or pollution as the other Great Lakes. Recognizing this unique and invaluable resource, the federal, state and provincial, and U.S. tribal governments; First Nations; environmental groups; industry; and the public have taken steps to protect this great legacy for generations to come. This shared partnership has served as a model the world over for cooperative binational resource management.

The Great Lakes Water Quality Agreement (GLWQA) between the U.S. and Canada commits the two countries (the Parties) to address the water quality issues of the Great Lakes in a coordinated fashion. Annex 2 of the GLWQA provides a framework for the reduction of critical pollutants as they relate to impaired beneficial uses of open lake waters. In undertaking Lakewide Management Plans (LaMP), the Parties agree to build upon cooperative efforts with state and provincial governments and to ensure that the public is consulted. The Parties, partner agencies, and Tribal/First Nations also recognize the need to conduct lakewide adaptive management using an ecosystem approach which addresses human health, habitat, terrestrial wildlife communities, aquatic communities, and developing sustainability.

#### 1.1 THE LAKE SUPERIOR BINATIONAL PROGRAM

In 1990, the fifth biennial report of the International Joint Commission (IJC) to the U.S. and Canadian governments recommended that Lake Superior be designated as a demonstration area where "no point source discharge of any persistent toxic substance will be permitted." In response, on September 30, 1991, the federal governments of Canada and the U.S., the Province of Ontario, and the States of Michigan, Minnesota, and Wisconsin announced a **Binational Program to Restore and Protect Lake Superior**. Known as the Lake Superior Binational Program (LSBP), the Program identifies two major areas of activity:

- A Zero Discharge Demonstration Project
- The Broader Program

The LSBP also recognizes that public participation is an important part of the program.

The Zero Discharge Demonstration Program (ZDDP) established Lake Superior as a demonstration project to achieve zero discharge and zero emission of nine toxic, persistent, and bioaccumulative chemicals: mercury, total polychlorinated biphenyls (PCBs), dieldrin/aldrin, chlordane, DDT, toxaphene, 2,3,7,8-TCDD (dioxin), hexachlorobenzene (HCB) and octachlorostyrene (OCS). Voluntary pollution prevention is the preferred approach to achieving reduction goals, but enhanced controls and regulations might be necessary to achieve zero discharge.

<u>The Broader Program</u> recognizes that zero discharge of persistent toxic substances alone will not be sufficient to restore and protect Lake Superior. The Broader Program focuses on the coordination needed among the many resource and environmental agencies.

<u>Public Involvement</u> is critical to the success of the Binational Program. The LSBP highlights the importance of the partnership approach to achieve specified common goals. The Program encourages the commitment of all partners to develop new and innovative approaches to ecosystem management. The citizens of the basin are partners and stakeholders in the Binational Program.

#### **LSBP Organization**

#### <u>Lake Superior Task Force</u>

The Task Force consists of senior Canada and U.S. federal, provincial, and state representatives and tribal members who make management decisions related to Lake Superior. The Task Force serves as a steering committee and is responsible for program direction.

#### Superior Work Group

The Work Group is comprised of Canadian and U.S. technical experts who represent various agencies and organizations that manage Lake Superior water and other resources. The Work Group reports to the Task Force. The Work Group is comprised of a number of committees, currently including: critical pollutants, habitat, aquatic communities, terrestrial wildlife communities, developing sustainability, and public involvement. These committees address pollution prevention and reduction, habitat issues, aquatic and terrestrial community diversity and sustainability, special designations, ecosystem integrity and monitoring, human use and health issues, and public communication and involvement.

#### Lake Superior Binational Forum

The Forum is a group of 24 Lake Superior citizen volunteers who make recommendations to the governments, consult with the broader public, and carry out joint LaMP

implementation projects. Forum members bring perspectives from a variety of community sectors including business, environmental groups, academia and industry. The vision statement endorsed in 1992 by the Forum is also a philosophical backdrop for the Binational Program.

#### A VISION FOR LAKE SUPERIOR

As citizens of Lake Superior, we believe...

that water is life and the quality of water determines the quality of life.

#### We seek a Lake Superior watershed ...

that is a clean, safe environment where diverse life forms exist in harmony; where the environment can support and sustain economic development and where the citizens are committed to regional cooperation and personal philosophy of stewardship;

that is free of toxic substances that threaten fish, wildlife and human health; where people can drink the water or eat the fish anywhere in the lake without restrictions;

where wild shorelines and islands are maintained and where development is well planned, visually pleasing, biologically sound, and conducted in an environmentally benign manner;

which recognizes that environmental integrity provides the foundation for a healthy economy and that the ingenuity which results from clean, innovative and preventive management and technology can provide for economic transformation of the region;

where citizens accept the personal responsibility and challenge of pollution prevention in their own lives and lifestyles and are committed to moving from a consumer society to a conserver society; and

where there is greater cooperation, leadership and responsibility among citizens of the basin for defining long-term policies and procedures which will protect the quality and supply of water in Lake Superior for future generations.

We believe that by effectively addressing the issues of multiple resource management in Lake Superior, the world's largest lake can serve as a worldwide model for resource management.

Endorsed by the Lake Superior Binational Forum on January 31, 1992 as an expression of the hearts and minds of all of us.

This vision statement expresses the commitment and desire of members of the Lake Superior community to foster a healthy, clean, and safe Lake Superior ecosystem. It reflects the diverse pathways and mechanisms by which humans and nature interact within land and water ecosystems, and challenges the inhabitants of the Lake Superior watershed to accept personal responsibility for protecting the Lake and the landscape that sustains it. The vision statement specifies broad, powerful objectives for the Lake Superior ecosystem, in plain language.

#### 1.1.1 LaMP Documents Produced To Date

Historically, formal LaMP "stages" were to be submitted to the IJC when a key stage of work was completed, in accordance with the framework outlined in Annex 2 of the 1987 amendments to the GLWQA:

- <u>Stage 1</u>: When problem definition is complete and critical pollutants are identified;
- Stage 2: When chemical load reduction schedules are completed;
- Stage 3: When remedial measures have been selected: and
- <u>Stage 4</u>: When monitoring indicates that the contribution of critical pollutants to impaired beneficial uses has been eliminated.

LaMP Stages 1, 2 and 3 have been completed for the chemical portion of the Lake Superior LaMP.

The Lake Superior Stage 1 LaMP which was submitted to the IJC in September 1995, used environmental data to identify 22 critical pollutants that 1) impaired or were likely to impair beneficial uses in the Lake, 2) were likely to affect human health or wildlife because they exceed chemical yardsticks, or 3) impair Lake ecosystem objectives. The Stage 1 LaMP summarizes all known data on critical pollutant loadings from point sources throughout the Lake Superior basin.

The Stage 2 LaMP, which was submitted to the IJC in July 1999, sets remediation goals or load reduction schedules for the nine virtual elimination pollutants identified in the Stage 1 LaMP. The Lake Superior Binational Forum stakeholders group submitted pollutant reduction recommendations, which were public and agency reviewed, edited and formed the basis for the final targets set in the Stage 2 LaMP. In Stage 2, the critical pollutants were placed into management categories that reflect pollutant impacts, tendency to bioaccumulate, and occurrence at toxic levels.

The Stage <u>3 LaMP</u> requirements under the GLWQA, captured in chapter 4 of LaMP 2000, selects pollutant load reduction strategies and remedial actions with respect to the nine virtual elimination pollutants: mercury, PCBs, dieldrin/aldrin, chlordane, DDT, toxaphene, dioxin, hexachlorobenezene, and octachlorostyrene.

In addition to staged LaMP reporting on the ZDDP, work proceeded in two areas between 1991 and 1998: habitat and non-regulatory special designations. In the program area of habitat, agencies developed ecological criteria for important Lake Superior habitat, set up a database for habitat sites, prepared a comprehensive GIS-based map of important habitat sites and areas, and examined the impact from major dischargers on habitat. In the program area of sustainability, criteria for non-regulatory special designations were developed. One outcome of this work was the Parks Canada project to designate a

National Marine Conservation Area (NMCA) for one third of the Canadian waters of Lake Superior. It is expected that the NMCA will be formally established in 2004.

#### **1.1.2** Ecosystem Components

While the initial focus of the LaMP work was on the reduction of critical pollutants, establishing the zero discharge demonstration program, and a broader program that advanced our understanding of habitat and landscapes, work has been carried out in other areas as well. The partner agencies have developed LaMP documents for a number of ecosystem themes, including aquatic communities, terrestrial wildlife communities, habitat, human health, and developing sustainability. The work in these themes was released for the first time for public comment and review in LaMP 2000.

Adopting an ecosystem approach has initiated a shift from a narrow perspective of managing environmental media (water, air, and soil) or a single resource (e.g., fish or trees) to a broader perspective that focuses on managing human uses and abuses of watersheds or bioregions and that comprehensively addresses all environmental media and resources within the context of a living system. The Lake Superior LaMP is guided by a set of ecosystem objectives and indicators to judge progress. Published as a discussion paper in 1995, the document *Ecosystem Principles and Objectives*, *Indicators, and Targets for Lake Superior* describes extensive ecosystem objectives and sub-objectives. These objectives have been refined and updated since the document's original release and are described in abbreviated form below:

- 1. <u>General Objective</u> Human activity in the Lake Superior basin should be consistent with *A Vision for Lake Superior*. Future development of the basin should protect and restore the beneficial uses as described in Annex 2 of the GLWQA.
- 2. <u>Chemical Contaminants Objective</u> Levels of persistent, bioaccumulative, and toxic chemicals should not impair beneficial uses of the natural resources of the Lake Superior basin. Levels of chemical contaminants which are persistent, bioaccumulative, and toxic should ultimately be virtually eliminated in the air, water and sediment in the Lake Superior basin. A zero discharge demonstration program is the primary means for achieving reductions of in-basin sources of contaminants.
- 3. <u>Aquatic Communities Objective</u> Lake Superior should sustain diverse, healthy, reproducing and self-regulating aquatic communities closely representative of historical conditions.
- 4. <u>Terrestrial Wildlife Objective</u> The Lake Superior ecosystem should support a diverse, healthy and sustainable wildlife community in the Lake Superior Basin.
- 5. <u>Habitat Objective</u> To protect, maintain and restore high-quality habitat sites in the Lake Superior basin and the ecosystem processes that sustain them. Land and water

- uses should be designed and located compatible with the protective and productive ecosystem functions provided by these natural landscape features.
- 6. <u>Human Health Objective</u> The goal of the Lake Superior LaMP Human Health Chapter is to fulfill the human health requirements of the GLWQA, including: defining the threat to human health and describing the potential adverse human health effects arising from exposure to critical pollutants and other contaminants (including microbial contaminants) found in the Lake Superior basin, addressing current and emerging human health issues of relevance to the LaMP, and identifying implementation strategies currently being undertaken to protect human health and suggesting additional implementation strategies that would enhance the protection of human health.
- 7. Developing Sustainability Human use of the Lake Superior ecosystem should be consistent with the highest social and scientific standards for sustainable use, and should not degrade it, nor any adjacent ecosystems. Use of the Basin's natural resources should be consistent with their capability to sustain the ecosystems' identity and functions, should not risk the socioeconomic and cultural foundations of any citizens, nor deny any generation the benefits of a healthy, natural Lake Superior ecosystem. The obligation of local communities to determine their future should be incorporated in any polices directed at the management of natural and social resources in the Basin.

*The Ecosystem Principles and Objectives* document also contained a set of preliminary indicators and targets. Proposed objectives, and "best bet" indicators to monitor progress on these objectives, were proposed and reviewed at a workshop in 1999.

In the *LaMP 2002 update*, it was noted that a comprehensive set of ecosystem targets needed to be developed to guide management actions over the long term. In keeping with the public's recommendation of integrating the habitat, terrestrial wildlife, and aquatic committees, the three committees started work on developing a set of ecosystem goals. The ecosystem goals being developed are for (1) uplands, (2) wetlands, (3) tributaries and inland lakes, (4) open lake, and (5) basin-wide considerations. Specific draft examples were provided as follows:

- Uplands: Provide sources of native plants and seeds in an ecologically appropriate manner for use in restoration projects by 2006. Write and implement ecologically based integrated watershed management plans for all watersheds in the Lake Superior basin by 2025.
- Wetlands: Create and distribute a spatial database of coastal wetlands organized by type and condition and identify areas where restoration can occur by 2006. Restore 25 percent of the degraded wetland acreage in the Lake Superior basin by 2010.
- Tributaries and Inland Lakes: Restore or protect 25 percent of the riparian conifer forest acreage by 2010. Rehabilitate 50 percent of 64 tributaries to Lake Superior

- in order to achieve Fish Community Objectives for indigenous lake trout, brook trout, walleye, and lake sturgeon. Rehabilitate the remaining tributaries by 2050.
- Open Lake: By 2006, implement lake-wide acoustics monitoring to measure the abundance and species composition of the pelagic fish community. By 2010, quantify and describe the bottom substrates in 50 percent of Lake Superior waters that are less than 30 meters deep, and by 2015, quantify and describe the bottom substrates in the remaining waters that are less than 30 meters deep.
- Basin-Wide: Develop and establish a unified, binational, GIS-based database that
  includes the most current and functioning basin-wide decision support models
  needed for ecosystem and watershed management and methods for providing data
  access and distribution by 2006. Complete an inventory and control plan for
  existing priority exotic species in the Lake Superior basin by 2010. By 2020,
  transfer knowledge of best management practices and LaMP goals to all affected
  units of government (townships, counties, and municipalities) within the 15
  watersheds of Lake Superior.

#### 1.2 Lamp Acceleration and the Lamp Document

#### 1.2.1 What is LaMP 2004?

In May 1999, the Great Lakes States Environmental Directors issued a challenge to the U.S. Environmental Protection Agency (U.S. EPA) that all LaMP documents were to be completed by Earth Day 2000. This challenge was accepted at a meeting of the Binational Executive Committee (BEC), which is composed of senior managers from the U.S. EPA, Environment Canada, the Great Lakes states, the Province of Ontario, and several tribes. A resolution was adopted by the BEC that calls for the completion by April 2000 of a "LaMP 2000" document which would reflect the state of the knowledge and progress of the LaMPs at that time (See Addendum 1-A to this chapter).

LaMPs were published in 2000 and progress reports were released in the spring of 2002. Analysis by various LaMP work groups identified a need to refine the LaMP reporting process, particularly with regard to the time, effort, and resources needed to produce the documents. Greater emphasis needed to be placed on implementation and partnerships to protect each Lake basin. To that end, the BEC endorsed an approach to reporting in 2003 that strikes a balance between consistency among LaMPs and individual LaMP needs, while minimizing reporting efforts. LaMP teams endeavor to spend at least 80% of their time on LaMP implementation, and a maximum of 20% on reporting.

The LaMP document serves several purposes. First, it summarizes the technical research and scientific study of the Lake Superior ecosystem. Second, it represents a framework and road map for guiding and supporting priority actions and/or additional research in the basin. Third, the document presents actual pollution prevention, restoration, and other actions that governments, industries, tribes, and other stakeholders can take to achieve the

overall goals and visions of the LaMP. Finally, the document will serve as a strategic plan to help achieve sustainability in the basin ecosystem.

While the Lake Superior LaMP 2002 document was a summary progress report, this 2004 document is the first of what will be biennial updates, with the latest available scientific and technical information incorporated into the existing LaMP document. The primary audience for this report is the Parties and their partners who are charged with lakewide management. Secondarily, this report will also be used to meet reporting requirements to the IJC.

#### 1.2.2 Action/Projects Matrices

Each of the LaMP chemical and ecosystem components contain specific actions and projects that will be taken to help achieve the goals and objectives of the LaMP. Some of these actions already have commitments and funding by various state, federal, provincial or other entities. Other actions are categorized as high priority but still need agency commitment or funding. These actions can be found in the respective chapters in the LaMP document.

## 1.3 RELATIONSHIP OF THE LaMP TO OTHER INITIATIVES AND EFFORTS

#### 1.3.1 Remedial Action Plans for Areas of Concern

The GLWQA amendments of 1987 also called for the development of Remedial Action Plans (RAP) for designated Areas of Concern. The primary goal of the RAPs is to restore impaired "beneficial uses," both ecological and cultural, as identified in Annex 2 of the GLWQA amendments, in degraded areas within the basin. The GLWQA amendments directed the two federal governments to cooperate with state and provincial governments to develop and implement RAPs for each AOC. In the Great Lakes basin, 43 AOCs have been identified by the U.S. and Canadian governments, 26 in U.S. waters, and 17 in Canadian waters (five are shared between the U.S. and Canada on connecting river systems).

Collingwood Harbour and Severn Sound, in Ontario, are the first two of these 43 sites to be de-listed. There are eight AOCs in the Lake Superior Basin, four in Canada, three in the U.S., and one shared between the two countries along the St. Marys River. A matrix summarizing the current status of the Lake Superior RAPs may be found in **Appendix A** of the LaMP.

The RAPs and LaMPs are similar in that they both use an ecosystem approach to assessing and remediating environmental degradation, consider the 14 beneficial use impairments outlined in Annex 2, and rely on a structured public involvement process. RAPs, however, encompass a much smaller geographic area, concentrating on an

embayment, a single watershed or stretch of a river. The main focus of a RAP is on environmental degradation in that specific area, and remediating the beneficial use impairments locally. Most of the Lake Superior RAPs have had active local Public Advisory Committees (PACs), with stakeholders in some cases undertaking local remediation projects. In most AOCs, the beneficial use impairment (e.g. habitat loss) can be related or connected to local activities. On the other hand, some fish advisories are attributable to the lakewide concentrations of persistent, bioaccumulative toxic chemicals.

Forging a strong relationship between the LaMPs and the RAPs is important to the success of both efforts. The AOCs can, in many cases, serve as point source discharges to the lake as a whole. Improvements in the AOCs will therefore, eventually help to improve the entire lake. Much of the expertise about the use impairments and possible remedial efforts reside at the local level, cooperation between the two efforts is essential in order for the LaMPs to remove lakewide impairments.

#### 1.3.2 Great Lakes Binational Toxics Strategy

Signed between the U.S. and Canada in 1997, the Great Lakes Binational Toxics Strategy (GLBTS) helps provide an overall coordinating effort across the lakes to reduce and virtually eliminate persistent toxic substances in the Great Lakes basin. The Binational Toxics Strategy provides a framework for actions to reduce or eliminate persistent toxic substances and establishes reduction challenges in the time frame 1997 to 2006 for twelve Level 1 persistent toxic substances including mercury and PCBs.

This effort is critical to the toxic reduction efforts of the Lake Superior LaMP for several reasons. First, the GLBTS can work in the national and international arena to address out-of-basin air deposition sources of toxic substances, an increasingly important source of inputs to the Lake. Second, it can help coordinate ongoing toxic reduction efforts across the basin, disseminating critical information on these successful projects. Also, because the GLBTS effort is closely coordinated with the U.S. national Persistent, Bioaccumulative and Toxic Chemical Initiative at U.S.EPA headquarters, the GLBTS can disseminate the most current national and international scientific information on the Lake Superior critical pollutants. Finally, the ambitious reduction time frames and schedules for virtual elimination of critical pollutants at the basin-wide and national level can help support similar reduction efforts in Lake Superior.

The GLBTS has attained reduction goals for nine of its Level I Persistent Toxic Substances. By 2006, the GLBTS expects to meet four additional reduction targets and be well advanced toward meeting the reduction goals for the remaining substances.

There are positive signs of progress in the Great Lakes. Canada has exceeded its 90% challenge reduction in the use, generation and release of alkyl-lead and the United States has met the binational challenge of confirming no-use of alkyl-lead in automotive gasoline. Canada has also met its Level I pesticide challenge that there is no longer use or release from sources that enter the Great Lakes basin of five bioaccumulative pesticides

(chlordane, aldrin/dieldrin, DDT, mirex, and toxaphene). The GLBTS has also confirmed that Ontario has destroyed 85% of its high level PCBs, achieved a reduction in dioxin and furan emissions by 79% and recorded a decrease in mercury emissions into the Great Lakes basin by 83%.

#### 1.3.3 U.S. Great Lakes Strategy

On April 2, 2002, the U.S. Policy Committee released the Great Lakes Strategy to advance Great Lakes protection and restoration efforts. The U.S. Policy Committee, a forum of senior-level representatives from the Federal, State, and Tribal agencies responsible for environmental and natural resources management of the Great Lakes, designed the strategy to help coordinate and streamline efforts of the many governmental partners involved with protecting the Great Lakes. The Strategy was developed with the consultation of the Great Lakes public. Workshops were held in Duluth, Chicago, Detroit, and Niagara Falls to solicit comments from local governments, industry, non-governmental environmental organizations, and the general public.

The Strategy focuses on multi-Lake and basin-wide environmental issues and establishes common goals that the governmental partners will work toward. It supports existing efforts underway, including Lakewide Management Plans and Remedial Action Plans for Areas of Concern, by addressing issues that are beyond the scope of these programs and helping integrate them into an overall basinwide context. It also advances the implementation of the United States' responsibilities under the Great Lakes Water Quality Agreement of 1987. The Strategy sets forth specific objectives and actions that will reduce contaminants, restore habitat, and protect the living resources of the basin.

The U.S. Policy Committee is currently implementing the Strategy and tracking progress on a yearly cycle. Management priorities and corrective actions are identified at biennial U.S. Policy Committee meetings and implemented by participating agencies.

#### **ADDENDUM 1-A**

## BINATIONAL EXECUTIVE COMMITTEE CONSENSUS POSITION ON THE ROLE OF LAMPS IN THE LAKE RESTORATION PROCESS

### Binational Executive Committee Consensus Position on the Role of LAMPS in the Lake Restoration Process

The development and implementation of Lakewide Management Plans (LaMPs) are an essential element of the process to restore and maintain the chemical, physical, and biological integrity of the Great Lakes ecosystem. Through the LaMP process, the Parties, with extensive stakeholder involvement, have been defining the problems, finding solutions, and implementing actions on the Great Lakes for almost a decade. The process has taken much longer and has been more resource-intensive than expected.

In the interest of advancing the rehabilitation of the Great Lakes, the Binational Executive Committee calls on the Parties, States, Provinces, Tribes, First Nations, municipal governments, and the involved public to significantly accelerate the LaMP process. By accelerate, we mean an emphasis on taking action and a streamlined LaMP review and approval process. Each LaMP should include appropriate actions for restoration and protection to bring about actual improvement in the Great Lakes ecosystem. Actions should include commitments by the governments, parties and regulatory programs, as well as suggested and voluntary actions that could be taken by non-governmental partners. BEC endorses the April 2000 date for the publication of "LaMP 2000", with updates every two years.

BEC is committed to ensuring a timely review process and will be vigilant in its oversight.

The BEC respects and supports the role of each Lake Management Committee in determining the actions that can be achieved under each LaMP. BEC expects each Management Committee to reach consensus on those implementation and future actions. Where differences cannot be resolved, BEC is committed to facilitating a decision. BEC recognizes the Four-Party Agreement for Lake Ontario and the uniqueness of the agreed upon binational workplan.

The LaMPs should treat problem identification, selection of remedial and regulatory measures, and implementation as a concurrent, integrated process rather than a sequential one. The LaMPs should embody an ecosystem approach, recognizing the interconnectedness of critical pollutants and the ecosystem. BEC endorses application of the concept of adaptive management to the LaMP process. By that, we adapt an iterative process with periodic refining of the LaMPs which build upon the lessons, successes, information, and public input generated pursuant to previous versions. LaMPs will adjust over time to address the most pertinent issues facing the Lake ecosystems. Each LaMP should be based on the current body of knowledge and should clearly state what we can do based on current data and information. The LaMPs should identify gaps that still exist with respect to research and information and actions to close those gaps.

Adopted by BEC on July 22, 1999.